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| APPLICATION NO.                 | FILING DATE | FIRST NAMED INVENTOR        | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------|-------------|-----------------------------|---------------------|------------------|
| 10/082,974                      | 02/25/2002  | Christopher Bentley Shumate | AUROBIO.013CC1      | 8118             |
| 20995                           | 7590        | 12/16/2003                  | EXAMINER            |                  |
| KNOBBE MARTENS OLSON & BEAR LLP |             |                             | HANDY, DWAYNE K     |                  |
| 2040 MAIN STREET                |             |                             | ART UNIT            |                  |
| FOURTEENTH FLOOR                |             |                             | PAPER NUMBER        |                  |
| IRVINE, CA 92614                |             |                             | 1743                |                  |

DATE MAILED: 12/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/082,974

Applicant(s)

SHUMATE ET AL.

Examiner

Dwayne K Handy

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☒ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5/29/02. 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Double Patenting*

1. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefore ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

2. Claims 1 and 4-30 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-28 of prior U.S. Patent No. 6,372,185. This is a double patenting rejection.

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 2 and 3 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,372,185 in view of Earley et al. (5,455,008). Claim 1 teaches every element of claims 2 and 3 of the instant application except for chemical solutions being test chemicals or polynucleotides. Earley et al. teach an apparatus for robotically performing Sanger DNA sequencing reactions. The apparatus contains a both the nucleotides and chemical required for this reaction. It would have been obvious to one of ordinary skill in the art to provide these chemical solutions in order to perform automated DNA sequencing reactions.

It should be noted that the Examiner believes that the claims as they are currently written do not further limit claims 2 and 3 since applicant appears to be placing a limitation on the chemical solutions to be used in the claimed system and not the system itself. The Examiner believes, however, that it would be obvious to provide these chemical elements in a chemical dispensing system should applicant amend the claims to give these limitations patentable weight in the future.

#### ***Inventorship***

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1-7, 10-17, and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lebl et al. (U.S. Pat. No. 6,045,755 - "Lebl") in view of Pfof et al. (U.S. Pat. No. 5,104,621 - "Pfof"). Lebl teaches every element of claims 1-7, 10-17, and 28-30 except for the table configured to engage multiwell plates that is movable in an X-Y plane and capable of moving to a number of different positions. Lebl shows a workstation that contains a plurality of liquid handlers (examples are shown as #15/16 in

Figure 1) which have a head capable of moving in a Z-direction (see column 32, lines 48-60, which discloses an embodiment which includes a syringe dispenser which may be raised and lowered to/from the work surface). The liquid handlers align with different wells on plates have 864 wells or less (column 13, lines 55-67 discloses that microtitre plates of 96, 384, or more wells may be used with the workstation). Lebl also contains a wash station for washing the fluid handling elements (not pictured, but described in col. 28, lines 54-67) and a computation unit for controlling the elements of the workstation (column 35). Lebl does not specifically recite a "stacker" and "ladder/deladder" but does recite "appropriate closing and sealing means" through the use of robots (columns 3 and 4 - Summary section) as well as robot arms capable of "accurate three-dimensional positioning" (top of column 5). This use of a robot arm and the use of stacked vessels to save space would lead one of ordinary skill in the art to recognize that the robot could also be used to stack the vessels. Again, Lebl does not teach a table which is configured to engage a multiwell plate and movable in an X-Y plane. Pfof shows an automated analytical workstation that includes a table (#40) for supporting a microtiter plate. The table is movable in the X-Y plane and is used to align the microtiter plate with dispensing and analytical modules. It would have been obvious to one of ordinary skill in the art to combine the motorized, movable table of Pfof with the workstation of Lebl to obtain applicant's device. One would add the table of Pfof to provide an additional means of aligning the dispensing means with the reaction wells to prevent spills or improper loading of the wells.

As for the limitations of 4 liquid handlers (cl. 10) and the table moving at an accuracy within 0.09 mm (cl. 28): it would be obvious to provide any number of multiple liquid handlers in order to speed up delivery of liquids to the wells. Also, duplication of parts (liquid handlers) has been held as obvious (In re Harza 124 USPQ 378). The accuracy of the table movement could easily be achieved through the control of the computer operating the device.

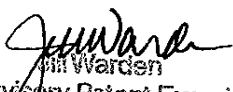
**Conclusion**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwayne K Handy whose telephone number is (703)-305-0211. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (703)-308-4037. The fax phone number for the organization where this application or proceeding is assigned is (703)-872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0661.

Dkh  
December 4, 2003

  
Jill Warden  
Supervisory Patent Examiner  
Technology Center 1700